

WHAT IS CLAIMED IS:

1. A photothermographic material comprising at least (a) a photosensitive silver halide, (b) a silver salt of an organic acid, (c) a reducing agent and (d) a hydrophobic and
5 thermoplastic organic binder on a support, which contains a heat-fusible solvent that is solid at an ordinary temperature and can be fused at a heat development temperature.
- 10 2. A photothermographic material according to Claim 1, which is produced through a step of coating and drying a coating solution containing a latex dispersed in water as the organic binder.
- 15 3. A photothermographic material according to Claim 1, which contains a halogen-releasing precursor.
- 20 4. A photothermographic material according to Claim 1, which contains an ultrahigh contrast agent.
- 25 5. A photothermographic material according to Claim 1, which is produced through at least one step selected from a step of coating and drying a coating solution containing microparticles of the reducing agent solid-dispersed in water, a step of coating and drying a coating solution containing microparticles of an ultrahigh contrast agent solid-dispersed in water, and a step of coating and drying a coating solution containing microparticles of a halogen-releasing precursor solid-dispersed in water.
- 30 6. A photothermographic material according to Claim 1, wherein the heat-fusible solvent is urea or a derivative thereof.
- 35 7. A photothermographic material according to Claim 6, wherein the heat-fusible solvent is selected from the group consisting of urea, dimethylurea, phenylurea, diethyleneurea, diisopropylurea, dimethoxyethylurea, tetramethylurea and

tetraethylurea.

8. A photothermographic material according to Claim 1,
wherein the heat-fusible solvent is an amide derivative.

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9. A photothermographic material according to Claim 8,
wherein the heat-fusible solvent is selected from the group
consisting of acetamide, stearyl amide, p-toluamide, p-propa-
10 noyloxyethoxybenzamide, propionamide, butanamide, benzamide,
diacetamide, aceta nilide, ethylacetamide acetate, 2-chloropro-
pionamide, phthalimide, succinimide and N,N-dimethylacetamide.

10. A photothermographic material according to Claim 1,
wherein the heat-fusible solvent is a sulfonamide derivative.

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11. A photothermographic material according to Claim 10,
wherein the heat-fusible solvent is selected from the group
consisting of phenylsulfonamide, p-toluenesulfonamide,
p-chlorophenylsulfonamide, o-aminophenylsulfonamide and
20 2-amino sulfonyl-5-chlorothiophene.

12. A photothermographic material according to Claim 1,
wherein the heat-fusible solvent is a polyhydric alcohol.

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13. A photothermographic material according to Claim 12,
wherein the heat-fusible solvent is selected from the group
consisting of 1,6-hexanediol, pentaerythritol, D-sorbitol,
dixylitol, 1,4-cyclohexanediol and 2,2'-dihydroxybenzophen-
one.

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14. A photothermographic material according to Claim 1,
wherein the heat-fusible solvent is a polyethylene glycol.

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15. A photothermographic material according to Claim 14,
wherein the polyethylene glycol has a molecular weight of
100-100,000.

16. A photothermographic material according to Claim 1, which contains the heat-fusible solvent in an amount of 5-500 parts by weight per 100 parts by weight of the binder.

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17. A photothermographic material according to Claim 16, which contains the heat-fusible solvent in an amount of 10-300 parts by weight per 100 parts by weight of the binder.

10 18. A photothermographic material according to Claim 1, which contains the heat-fusible solvent in an image forming layer.

15 19. A photothermographic material according to Claim 1, which contains the heat-fusible solvent in a layer other than the image forming layer.

20 20. A photothermographic material according to Claim 1, wherein the hydrophobic and thermoplastic organic binder is selected from the group consisting of gelatins denatured to be hydrophobic, denatured poly(vinyl alcohols), cellulose acetates, cellulose acetate butyrates, poly(vinylpyrrolidones), poly(vinyl acetates), poly(vinyl chlorides), polyacrylates, poly(methyl methacrylates), copoly(styrene/maleic anhydrides), copoly(styrene/acrylonitriles), copoly(styrene/butadienes), poly(vinyl acetals), poly(esters), poly(urethanes), phenoxy resins, poly(vinylidene chlorides), poly(epoxides), poly(carbonates), poly(vinyl acetates) and poly(amides).